

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT
(PCT Article 36 and Rule 70)

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| Applicant's or agent's file reference PA 4568 PCT.INT | FOR FURTHER ACTION | See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416) |
| International application No. PCT/GB 03/00869 | International filing date (<i>day/month/year</i>) 03.03.2003 | Priority date (<i>day/month/year</i>) 12.04.2002 |
| International Patent Classification (IPC) or both national classification and IPC G06F3/00 | | |
| Applicant CURSOR CONTROLS LIMITED et al. | | |

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 6 sheets, including this cover sheet.
- This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).
- These annexes consist of a total of sheets.
3. This report contains indications relating to the following items:
- I Basis of the opinion
 - II Priority
 - III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
 - IV Lack of unity of invention
 - V Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
 - VI Certain documents cited
 - VII Certain defects in the international application
 - VIII Certain observations on the international application

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| Date of submission of the demand 14.10.2003 | Date of completion of this report 23.09.2004 |
| Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465 | Authorized Officer Alonso y Goicolea, L Telephone No. +49 89 2399-7475 |



**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. PCT/GB 03/00869

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, Pages

1-22 as originally filed

Claims, Numbers

1-38 as originally filed

Drawings, Sheets

1/8, 3/8, 4/8, 6/8, 7/8 as originally filed
2/8, 5/8, 8/8 received on 13.05.2003 with letter of 12.05.2003

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- the language of publication of the international application (under Rule 48.3(b)).
- the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- contained in the international application in written form.
- filed together with the international application in computer readable form.
- furnished subsequently to this Authority in written form.
- furnished subsequently to this Authority in computer readable form.
- The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- the description, pages:
- the claims, Nos.:
- the drawings, sheets:

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5. This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).
(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)
6. Additional observations, if necessary:

III. Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

1. The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non-obvious), or to be industrially applicable have not been examined in respect of:
 - the entire international application,
 - claims Nos. 11-17,20-38
 - because:
 - the said international application, or the said claims Nos. relate to the following subject matter which does not require an international preliminary examination (specify):
 - the description, claims or drawings (*indicate particular elements below*) or said claims Nos. 38 are so unclear that no meaningful opinion could be formed (*specify*):
see separate sheet
 - the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed.
 - no international search report has been established for the said claims Nos. 11-17,20-38
2. A meaningful international preliminary examination cannot be carried out due to the failure of the nucleotide and/or amino acid sequence listing to comply with the standard provided for in Annex C of the Administrative Instructions:
 - the written form has not been furnished or does not comply with the Standard.
 - the computer readable form has not been furnished or does not comply with the Standard.

IV. Lack of unity of invention

1. In response to the invitation to restrict or pay additional fees, the applicant has:
 - restricted the claims.
 - paid additional fees.
 - paid additional fees under protest.
 - neither restricted nor paid additional fees.
2. This Authority found that the requirement of unity of invention is not complied with and chose, according to Rule 68.1, not to invite the applicant to restrict or pay additional fees.
3. This Authority considers that the requirement of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is

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- complied with.
- not complied with for the following reasons:
4. Consequently, the following parts of the international application were the subject of international preliminary examination in establishing this report:
- all parts.
- the parts relating to claims Nos. 1-10,18,19 .

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

| | | |
|-------------------------------|-------------|----------------|
| Novelty (N) | Yes: Claims | 1-10,18,19 |
| | No: Claims | |
| Inventive step (IS) | Yes: Claims | 3,4 |
| | No: Claims | 1,2,5-10,18,19 |
| Industrial applicability (IA) | Yes: Claims | 1-10,18,19 |
| | No: Claims | |

2. Citations and explanations

see separate sheet

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Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

Reference is made to the following document/s/:

- D1: EP-A-0 987 616 (PENNY & GILES COMPUTER PRODUCT) 22 March 2000 (2000-03-22)
- D2: US-A-5 288 993 (ARREGUIT JAVIER ET AL) 22 February 1994 (1994-02-22)
- D3: EP-A-0 573 018 (SYMBOL TECHNOLOGIES INC) 8 December 1993 (1993-12-08)
- D4: US-A-4 404 865 (KIM SNYG N) 20 September 1983 (1983-09-20)

- 1 The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 1 does not involve an inventive step in the sense of Article 33(3) PCT.

The document D1 is regarded as being the closest prior art to the subject-matter of claim 1 and discloses (the references in parentheses applying to this document):

an electronic cursor control device comprising a first chamber and a second chamber, wherein the two chambers are adjoined and separated by a fluid-tight separating wall; the first chamber contains electronic components; the second chamber comprises an aperture (paragraph 6-9);
the second chamber contains a ball;
detection means are operable in use to detect motion of the ball and to generate electronic signals representative of said motion (paragraph 18, 26; figures).

The subject-matter of claim 1 differs from D1 in that present claim 1 discloses an embodiment adapted to an optical detector device.

However optical cursor control devices correspond to the general knowledge of the person skilled in the art. See, for instance, document D2.

The adaptation of the device of D1 for its utilization with an optical detection system and the adoption of the necessary optical permeability conditions for the region separating the two chambers implies merely the utilization of what constitutes general knowledge in the field and represents one of many alternatives

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at the disposal of the skilled man and from which he will select without the exercise of inventive step.

- 2 Dependent claims 2 and 5 to 10, 18 and 19 (considered referring only to the examined claims) do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of inventive step, see documents D1, D3 and D4 and the corresponding passages cited in the search report.
- 3 The combination of the features of dependent claims 3 and 4 (combined to overcome the unclarities introduced by the term "sufficiently small") is neither known from, nor rendered obvious by, the available prior art.

These features delimit the objective technical problem of minimizing the perturbations of the optical detection path due to the presence of liquid in the ball chamber.